

Abstract of the Disclosure

Blood sugar levels are measured non-invasively based on temperature measurement. Values of blood sugar levels non-invasively measured by a temperature measuring system are corrected using blood oxygen saturation and blood flow volume. Optical sensors are provided for detecting scattered light, reflected light, and light that enters into the skin which travels out of the body surface. The measurement data is stabilized by taking into consideration the influence of the thickness of skin on blood oxygen saturation.